

October 21, 2004

Mr. R. T. Ridenoure  
Division Manager - Nuclear Operations  
Omaha Public Power District  
Fort Calhoun Station FC-2-4 Adm.  
Post Office Box 550  
Fort Calhoun, NE 68023-0550

SUBJECT: FORT CALHOUN STATION, UNIT NO. 1 - ISSUANCE OF AMENDMENT  
(TAC NO. MC1536)

Dear Mr. Ridenoure:

The Commission has issued the enclosed Amendment No. 229 to Renewed Facility Operating License No. DPR-40 for the Fort Calhoun Station, Unit No. 1 (FCS). The amendment consists of changes to the Technical Specifications (TS) in response to your application dated December 1, 2003, as supplemented by letter dated July 2, 2004.

The amendment changes TS 2.7, "Electrical Systems, TS Table 3-5, "Minimum Frequencies for Equipment Tests," and TS 5.0, "Administrative Controls," to modify the requirements for the diesel generator (DG) fuel oil for consistency with the Improved Standard Technical Specifications. The amendment also adds requirements for the DG lubricating oil and DG starting air.

A copy of the related Safety Evaluation is also enclosed. The Notice of Issuance will be included in the Commission's next biweekly *Federal Register* notice.

Sincerely,  
**/RA/**

Alan B. Wang, Project Manager, Section 2  
Project Directorate IV  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Docket No. 50-285

Enclosures: 1. Amendment No. 229 to DPR-40  
2. Safety Evaluation

cc w/encls: See next page

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NAME	MHiggins	DThatcher	RGramm
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Ft. Calhoun Station, Unit 1

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OMAHA PUBLIC POWER DISTRICT

DOCKET NO. 50-285

FORT CALHOUN STATION, UNIT NO. 1

AMENDMENT TO RENEWED FACILITY OPERATING LICENSE

Amendment No. 229  
License No. DPR-40

1. The Nuclear Regulatory Commission (the Commission) has found that:
  - A. The application for amendment by the Omaha Public Power District (the licensee) dated December 1, 2003, as supplemented by letter dated July 2, 2004, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
  - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
  - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
  - D. The issuance of this license amendment will not be inimical to the common defense and security or to the health and safety of the public; and
  - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, Renewed Facility Operating License No. DPR-40 is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 3.B. of Facility Operating License No. DPR-40 is hereby amended to read as follows:

B. Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 229, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. The license amendment is effective as of its date of issuance and shall be implemented within 120 days from the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

**/RA/**

Robert A. Gramm, Chief, Section 2  
Project Directorate IV  
Division of Licensing Project Management  
Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical  
Specifications

Date of Issuance: October 21, 2004

ATTACHMENT TO LICENSE AMENDMENT NO. 229

RENEWED FACILITY OPERATING LICENSE NO. DPR-40

DOCKET NO. 50-285

Replace the following pages of the Appendix A Technical Specifications with the attached revised pages. The revised pages are identified by amendment number and contain vertical lines indicating the areas of change.

REMOVE

2.7 – Page 1  
2.7 – Page 3  
2.7 – Page 4  
2.7 – Page 5  
2.7 – Page 6  
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3.2 – Page 3  
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3.2 – Page 6  
3.2 – Page 7  
3.2 – Page 8  
3.2 – Page 9  
5.0 – Page 19

INSERT

2.7 – Page 1  
2.7 – Page 3  
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2.7 – Page 5  
2.7 – Page 6  
2.7 – Page 7  
2.7 – Page 8  
3.2 – Page 3  
3.2 – Page 3a  
3.2 – Page 3b  
3.2 – Page 6  
3.2 – Page 7  
3.2 – Page 8  
3.2 – Page 9  
5.0 – Page 19

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NO. 229 TO RENEWED FACILITY

OPERATING LICENSE NO. DPR-40

OMAHA PUBLIC POWER DISTRICT

FORT CALHOUN STATION, UNIT NO. 1

DOCKET NO. 50-285

1.0 INTRODUCTION

By application dated December 1, 2003 (ML033380968), as supplemented by letter dated July 2, 2004 (ML041890312), Omaha Public Power District (OPPD) requested changes to the Technical Specifications (TS) (Appendix A to Renewed Facility Operating License No. DPR-40) for the Fort Calhoun Station, Unit No. 1 (FCS).

The proposed amendment would revise TS 2.7, "Electrical Systems," TS Table 3-5, "Minimum Frequencies for Equipment Tests," and TS 5.0, "Administrative Controls." Specifically, the proposed changes would revise the requirements for diesel generator (DG) fuel oil for consistency with the Improved Standard Technical Specifications (ISTS) and adds requirements for the DG lubricating oil and DG starting air.

The additional information provided in the supplemental letter dated July 2, 2004, did not expand the scope of the application as noticed and did not change the NRC staff's original proposed no significant hazards consideration determination published in the *Federal Register* on February 17, 2004 (69 FR 7526).

2.0 REGULATORY EVALUATION

If both sources of normal auxiliary power are lost (unit auxiliary transformer and system auxiliary transformer), the equipment essential to safe shutdown will be supplied by the seismic Class I DGs. The DGs are designed to furnish reliable in-plant alternating current (AC) power adequate for safe shutdown and for operation of engineered safeguards equipment. For adequate reliability, two DGs are provided. Each DG is complete with all auxiliaries necessary for operation and for ensuring quick starts. These DGs will automatically start and tie onto the 4160 volt AC vital buses on a loss of voltage on the bus.

The requested changes modify requirements for DG fuel oil for consistency with the ISTS and adds requirements for DG lubricating oil and DG starting air. As stated in the TS Bases, stored diesel fuel oil is required to have inventory to support seven days of full load operation. A seven-day supply of lubrication oil must also be available. This quantity is promulgated by

American National Standard ANSI N195-1976, "Fuel Oil Systems for Standby Diesel Generators" as endorsed by NRC Regulatory Guide (RG) 1.137 of same title. Fuel oil is also required to meet specific standards of quality. The fuel oil properties governed by the surveillance requirements (SRs) are water and sediment content, kinematic viscosity, specific gravity (or API gravity), and impurity level. The recommended fuel oil surveillance practices are addressed in RG 1.137. The basis for the starting air requirement is General Design Criterion 17, "Electric power systems," as related to the capability of the DG air starting system to meet independence and redundancy criteria. The industry standard that has been adopted to address this is that the air starting system should be capable of five cold start attempts without recharging the receiver(s).

The proposed TS amendment changes the surveillance interval for checking emergency diesel generator (EDG) fuel oil inventory and fuel oil water and sediment content. These changes affect SR 3.2, "Equipment and Sampling Tests." In addition, the licensee proposes additions to Limiting Conditions for Operation (LCO) Section 2.7, "Electrical Systems." The additions to the LCOs clarify the scope, allowed outage times, and actions required regarding EDG lubricating oil inventory, EDG fuel oil inventory, stored EDG fuel oil quality, and new EDG fuel oil quality.

The proposed TS changes also add a diesel fuel oil testing program to TS 5.0, "Administrative Controls." This program is intended to ensure that fuel oil is sampled and analyzed as a preventative measure against EDG degradation. The diesel fuel oil testing program references specific ASTM standards (ASTM D-2276 Method A-2 or A-3). The licensee proposes to move any references to specific standards to a licensee-controlled document to allow flexibility in the testing methods used. The licensee acknowledges that changes to the licensee-controlled document are performed in accordance with the provisions of Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.59.

The minimum design requirements for Fort Calhoun are based upon plant-specific design criterion documented in Appendix G of the FCS Updated Safety Analysis Report. The changes to TS 2.7, 3.2, and 5.0 satisfy the FCS Design Criterion 24, "Emergency Power Protection Systems," and FCS Design Criterion 39, "Emergency Power for Engineered Safety Features," which are similar to GDC 17.

The basis the staff used to determine if the proposed changes are acceptable is conformance to the existing regulatory basis and the precedents that have been established by License Amendment Nos. 227 and 201 to Facility Operating License Nos. DPR-53 and DPR-69 for the Calvert Cliffs Nuclear Power Plant, Units 1 and 2, respectively, and License Amendment No. 180 to Facility Operating License No. DPR-20 for the Palisades Plant. These license amendments converted the Calvert Cliffs and Palisades technical specifications to standard technical specification (STS) format consistent with the provisions of NUREG-1432, Revision 1, "Standard Technical Specifications, Combustion Engineering Plants" dated April 1995. Consistency with the provisions of NUREG-1432 is considered to be sufficient basis for accepting proposed TS changes for Fort Calhoun where plant-specific considerations are judged to be commensurate with the basis of the corresponding NUREG-1432 requirement.



### 3.0 TECHNICAL EVALUATION

The staff has reviewed the licensee's regulatory and technical analyses in support of its proposed license amendment which are described in Sections 5.0 and 6.0 of the licensee's submittal. The detailed evaluation below will support the conclusion that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

#### 3.1 Proposed New LCO 2.7(1)n

New LCO 2.7(1)n states, "Lubricating oil inventory for each DG is \$ 500 gallons." This TS is being added under the current LCO 2.7(1), "Minimum Requirements." The licensee stated that this proposed change will assure that a seven-day supply of DG lubricating oil is maintained. This requirement is more restrictive since no minimum requirement for the quantity of lubricating oil previously existed. Maintaining a seven-day supply is an industry standard and is consistent with LCO 3.8.3, "Diesel Fuel Oil, Lube Oil, and Starting Air," of NUREG-1432 and with the precedent set by License Amendment No. 180 for the Palisades Plant. Therefore, the staff finds the addition of this new requirement to be acceptable.

#### 3.2 Proposed New LCO 2.7(1)o

New LCO 2.7(1)o states, "Each required starting air receiver bank pressure is \$ 190 psig." This TS is being added under current LCO 2.7(1), "Minimum Requirements." The licensee stated that this proposed change will assure that sufficient starting air is available for five successive DG start attempts without recharging the air receivers. Maintaining sufficient starting air pressure for five successive cold start attempts without recharging the receiver(s) is an industry standard. This requirement is more restrictive since no minimum TS requirement for starting air receiver bank pressure previously existed. Specifying a required starting air receiver pressure is consistent with LCO 3.8.3, "Diesel Fuel Oil, Lube Oil, and Starting Air," of NUREG-1432 and with SRP Section 9.5.6, "Emergency Diesel Engine Starting System." It is also consistent with the precedent set by License Amendment No. 180 for the Palisades Plant. Therefore, the staff finds the addition of this new requirement to be acceptable.

#### 3.3 Proposed New LCO 2.7(3)

Proposed LCO 2.7(3), "Modification on Minimum Requirements for Diesel Fuel Oil, Diesel Lube Oil, and Starting Air," is being added under current LCO 2.7, "Electrical Systems." This LCO permits several conditions, i.e., modifications to minimum requirements, to exist simultaneously with the reactor coolant above 300EF as long as the reactor remains subcritical. This applicability statement is equivalent to that in the ISTS. The statement in proposed LCO 2.7(3), "any of the following conditions will be allowed" is consistent with that presented in tabular format in LCO 3.8.3 of NUREG-1432 along with the Note in LCO 3.8.3 stating, "Separate Condition entry is allowed for each DG." The current TS only permits one modification to minimum requirements to exist at a given time. The proposed LCO 2.7(3) is presented here, for clarity, in its entirety. The proposed LCO 2.7(3) reads as follows:

(3) Modification on Minimum Requirements for Diesel Fuel Oil, Diesel Lube Oil, and Starting Air.

The minimum requirements may be modified to the extent that any of the following conditions will be allowed after the reactor coolant has been heated above 300° F. However, the reactor shall not be made critical unless all minimum requirements are met.

- a. If the inventory of diesel fuel oil in FO-1 is less than 16,000 gallons and/or FO-10 is less than 10,000 gallons, but the combined inventory in FO-1 and FO-10 is greater than a 6 day supply (23,350 gallons), then restore the required inventory within 48 hours.
- b. If one or more diesel generators has lube oil inventory —500 gallons and <sup>TM</sup>450 gallons, then restore the lube oil inventory to within limits within 48 hours.
- c. If the total particulates of fuel oil stored in FO-1 or FO-10 is not within limits, then restore fuel oil total particulates to within limits within 7 days.
- d. If the properties of new fuel oil stored in FO-1 or FO-10 is not within limits, then restore stored fuel oil properties to within limits within 30 days.
- e. If one or more diesel generators has the required starting air receiver bank with pressure —190 psig and <sup>TM</sup>150 psig, then restore starting air receiver bank pressure to <sup>TM</sup>190 psig within 48 hours.
- f. If the Required Action and associated Completion Time of a, b, c, d, or e are not met or one or more diesel generators have diesel fuel oil, lube oil, or a required starting air subsystem not within limits for reasons other than a, b, c, d, or e, then declare the associated DG inoperable immediately.

LCO 2.7(3)a allows the "minimum requirement" for DG fuel oil quantity (LCO 2.7(1)m) to be modified to the extent that the listed condition will be allowed after the reactor coolant has been heated above 300EF. This has been added to address actions to restore DG fuel oil. This requirement, which was existing minimum requirement LCO 2.7(2)k, is being placed in this location for consistency with NUREG-1432. In this location, it is permitted along with other conditions. In its previous location it was permitted if it was the only modification to "minimum requirements." This modification is consistent with NUREG-1432 and with the precedents set by License Amendment No. 180 for the Palisades Plant and by License Amendment Nos. 227 and 201 for Calvert Cliffs Units 1 and 2, respectively. The staff finds this modification acceptable.

LCO 2.7(3)b allows the minimum requirement for DG lube oil to be modified to the extent that the listed condition will be allowed after the reactor coolant has been heated above 300EF. This is a new LCO. This condition represents a reduction of the lube oil supply that is below the seven-day supply but above a six-day supply. The licensee stated that this circumstance may be caused by events such as full load operation being required after an inadvertent start while at minimum required level, or feed and bleed operations of the lube oil which may be necessitated by increasing particulate levels or any number of other oil quality degradations. The licensee's cited justification for this requirement is that which is stated in the Bases of NUREG-1432 for this requirement. That is that this restriction allows sufficient time for obtaining the requisite replacement volume. A period of 48 hours is considered sufficient to complete restoration of the required level prior to declaring the DG inoperable. This period is acceptable based on the remaining capacity (<sup>TM</sup>6days), the fact that procedures will be initiated to obtain replenishment, and the low probability of an event during this brief period. This change is consistent with STS 3.8.3 of NUREG-1432 and with the precedent set by License Amendment No. 180 for the Palisades Plant. This change is more restrictive because the "minimum requirement" (new LCO 2.7(1)n) on lube oil quantity which it modifies did not exist previously. The staff finds this change acceptable.

LCO 2.7(3)c allows up to seven days for restoration of fuel oil particulate concentration to within the required limits. This condition is entered if the EDG fuel oil fails the acceptance criteria. In addition to the possibility that the fuel oil is contaminated, entrance into this condition could be attributed to poor sampling technique, contaminated sampling equipment, or laboratory errors. The seven-day window is proposed in order to allow time for re-evaluation of the particulate concentration in the fuel oil before declaring the EDG inoperable. Particulate concentration is unlikely to change significantly between surveillance intervals. Therefore, any samples that stray from the trend established by recent samples are potentially the result of a poorly taken sample or an error in analysis. If a sample truly indicates a particulate concentration that exceeds the requirements, the EDG would still be able to perform its intended duty. Fuel oil that exceeds the particulate concentration threshold, while not ideal for prolonged operation, will still burn properly in the diesel engine. The ability of the diesel to operate with elevated particulate concentration, in conjunction with the assurance that proper engine performance has been demonstrated within the prior 31 days, serves as reasonable justification for an allowance that fuel oil particulate levels be restored to a level within the requirements in no more than 7 days. Therefore, the staff finds this change acceptable.

LCO 2.7(3)d allows 30 days to restore the properties of new fuel oil to within the required limits if the fuel oil does not meet the standards of the fuel oil testing program. The fuel oil properties governed by the fuel oil testing program include the water and sediment content, kinematic viscosity, specific gravity (or API gravity), and impurity level. The period of 30 days provides time to test the stored fuel oil to determine that the new fuel oil, when mixed with the previously stored fuel oil, remains acceptable. If an analysis determines that the stored fuel oil is not within requirements, the 30 days would allow time to restore the stored fuel oil properties. Restoration could include feed and bleed procedures and filtering of the fuel oil. During the period of fuel oil restoration, the EDG would still be capable of performing its intended function if an EDG start and load was required. The requirements of the fuel oil testing program are designed to verify that the fuel oil is of high quality in order to prolong engine life and reduce required maintenance. Therefore, exceeding the requirements of the fuel oil testing program for the relatively short period of time required to restore the fuel oil properties (a maximum of

30 days) will not have an immediate impact on EDG operation. Therefore, the staff finds this change acceptable.

LCO 2.7(3)e allows the minimum requirement for DG starting air to be modified to the extent that the listed condition will be allowed after the reactor coolant has been heated above 300EF. This is a new requirement. This change is considered more restrictive because the "minimum requirement" (new LCO 2.7(1)o) on starting air which it modifies did not exist previously. FCS has two starting air systems, each capable of five DG starts. The word "required" is used in the new TS to distinguish it from the redundant equipment. This indicates that no action is entered if the redundant equipment becomes inoperable. This TS is consistent with ISTS 3.8.3 of NUREG-1432 and with the precedent set by License Amendment No. 180 for the Palisades Plant in that it sets a minimum requirement on receiver pressure. Therefore, the staff finds this change acceptable.

LCO 2.7(3)f is a new requirement. This requirement directs immediate declaration of DG inoperability if the required action and completion times of 2.7(3)a thru e are not met or if one or more DGs have diesel fuel oil, lube oil, or a required starting air subsystem not within limits for any other reason. This requirement is consistent with ISTS 3.8.3 of NUREG-1432 and with the precedents set by License Amendment Nos. 227 and 201 for Calvert Cliffs Units 1 and 2 respectively and License Amendment No. 180 for the Palisades Plant. Therefore, the staff finds this change acceptable.

The proposed changes to TS 2.7 are consistent with NUREG-1432. The staff finds the addition of LCO 2.7(3) and its associated requirements (a, b, c, d, e, and f), the addition of Section 2.7(1)n, and the relocation of Section 2.7(2)k to Section 2.7(3)a acceptable.

### 3.4 Proposed Surveillance Frequencies

The following items are proposed changes and additions to existing Table 3-5, "Minimum Frequencies for Equipment Tests." Item 9a is a modification of an existing requirement and items 9b through 9e are proposed new requirements.

		<u>Test</u>	<u>Frequency</u>	<u>USAR Section</u>
9a.	Diesel Fuel Supply	Fuel Inventory	M	8.4
9b.	Diesel Lubricating Oil Inventory	Lube Oil Inventory	M	8.4
9c.	Diesel Fuel Oil Properties	Test Properties	In Accordance with the Diesel Fuel Oil Testing Program	8.4

		<u>Test</u>	<u>Frequency</u>	<u>USAR Section</u>
9d.	Required Diesel Generator Air Start Receiver Bank Pressure	Air Pressure	M	8.4
9e.	Check For and Remove Accumulated Water From Each Fuel Oil Tank	Check For Water And Remove	Q	8.4

The surveillance interval for the diesel fuel supply surveillance appears as proposed 9a in the table. It is changed from current number 9. The frequency is being changed from daily to monthly. The licensee cited the ISTS Bases as justification for the change. That is, that the surveillance provides verification that there is a seven-day supply of fuel oil, and that the seven-day period is sufficient to place the unit in a safe shutdown condition and to bring in replenishment fuel from an offsite location. Also, the 31-day surveillance interval is adequate to ensure that a sufficient supply of fuel oil is available, since unit operators would be aware of any large uses of fuel oil during this period. If a large volume of fuel is used, the operators take action to replenish the fuel oil in order to maintain the required inventory. This change is consistent with NUREG-1432 and with the precedent set by License Amendment Nos. 227 and 201 for Calvert Cliffs Units 1 and 2, respectively. Therefore, the staff finds this acceptable.

Item 9b is a new requirement stating that the diesel lubricating oil inventory is required to be verified within limits on a monthly basis. This is considered more restrictive because this requirement did not exist previously in the TS. The licensee also cited the ISTS Bases as justification for this change. That is, the surveillance provides verification that there is a seven-day supply of lube oil. The 500 gallon requirement (new LCO2.7(1)n) is based on the DG manufacturer consumption values for the run time of the DG. Implicit in this SR is the requirement to assure the capability to transfer the lube oil from its storage location to the DG, since the DG lube oil sump does not hold adequate inventory for seven days of full load operation without the level reaching the manufacturer recommended minimum level. The 31-day surveillance interval is adequate to ensure that a sufficient lube oil supply is onsite, since DG start and run times are closely monitored by the unit staff. This change is consistent with NUREG-1432 and with the precedent set by License Amendment No. 180 for the Palisades Plant. Therefore, the staff finds this basis acceptable.

Surveillance 9c is added to Table 3-5 stating that the diesel fuel oil properties are to be tested in accordance with the diesel fuel oil testing program. This program mandates that tests are performed as a means of determining whether new fuel oil is of an appropriate grade and is not contaminated in any way that may have a detrimental impact on diesel engine combustion. These tests are to be performed prior to adding the new fuel oil to the storage tanks and must be conducted within 31 days of receiving the new fuel. This surveillance interval is established based on fuel oil degradation trends. Fuel oil degradation resulting from long-term storage manifests in the form of increased particulate concentration. The proposed bases for this surveillance call for the use of ASTM 6217-98 to determine particulate concentration. The

licensee proposes an exception to ASTM 6217-98 in that the filters used for the test may have a nominal pore size of up to 3 microns. This exception to the standard is added because the FCS inline filters are not designed to trap particles smaller than 3 microns. Particles less than 3 microns in size are not known to cause degradation of diesel engine performance, so the staff finds this change, including the exception, to be acceptable.

The FCS quality assurance plan references the guidance of RG 1.137, which recommends that new fuel should be analyzed within two weeks of being added to the supply tanks. Because the proposed SR 9c allows the analysis to be performed within 31 days, the licensee identified this change to the quality assurance program as a reduction in commitment in accordance with the provisions of 10 CFR 50.54(a)(4). The staff has reviewed the change and finds that an adequate basis is established by ISTS Section 3.8.3 and is therefore acceptable. The quality assurance plan should be revised to reflect the acceptability of a 31 day sampling period.

Item 9d is a new requirement stating that the diesel generator air start receiver pressure is required to be verified within limits on a monthly basis. The licensee cited the ISTS Bases as justification for the change. That is, that the surveillance ensures that without the aid of the refill compressor, sufficient air start capacity for each DG is available. The system design requirements provide for a minimum of five engine start cycles without recharging. A start cycle is defined as the cranking time required to accelerate the DG to firing speed. The pressure specified in this SR is intended to reflect the lowest value at which the five starts can be accomplished. The 31-day surveillance interval takes into account the capacity, capability, redundancy, and diversity of the AC sources and other indications available in the control room, including alarms, to alert the operator to below normal air start pressure. This change is consistent with NUREG-1432 and with the precedent set by License Amendment No. 180 for the Palisades Plant. Therefore, the staff finds this acceptable.

A surveillance to check for and remove accumulated water from each fuel oil storage tank has been added as item 9e to Table 3-5. This surveillance is designed to eliminate the potential for water entrainment in the fuel oil during EDG operation and to eliminate an environment that might result in microbiological fouling. Based on plant-specific data submitted by the licensee regarding the FCS fuel oil storage tank design, surveillance data delineating a history of low water content in the storage tanks, the FCS diesel fuel oil testing program, and detailed procedures for sampling fuel oil and removing water from the fuel oil, the licensee proposed an interval for this surveillance of 92 days. Based on the staff review of plant specific information, the staff finds this change acceptable.

### 3.5 Proposed TS 5.22 Diesel Fuel Oil Testing Program

The diesel fuel oil testing program is added as TS 5.22. The diesel fuel oil testing program includes purchasing, receipt testing of the new fuel, and periodic analysis of the stored fuel. This program is aligned with NUREG-1432 with two exceptions that are discussed below.

The first exception of the FCS diesel fuel oil testing program to NUREG-1432 is the testing of new fuel. The STS call for a visual inspection of the new fuel oil. The proposed TS 5.22.a.3 adds an alternative method for testing the new fuel for contamination. The proposed change



will modify the method for testing new fuel oil by permitting the acceptability of the fuel oil to be determined based on its water and sediment content rather than by performing a visual inspection to confirm a "clear and bright" appearance as described in ASTM D-2276. Diesel fuel oil has a high sulfur content and is dyed in accordance with the Environmental Protection Agency mandated requirements. The presence of this dye does not permit use of the color scale in the "clear and bright" visual test. For this reason, an alternate method of testing for water and sediment, such as a centrifuge, is necessary. Because the proposed method of testing for water and sediment will yield more meaningful information regarding the fuel oil quality, the staff finds the change acceptable.

The second exception to NUREG-1432 that FCS proposes is the relocation of all references to specific ASTM standards from TS 5.22 to a licensee-controlled document. Changes to the licensee-controlled document are performed in accordance with the provisions of 10 CFR 50.59, "Changes, tests, and experiments." Relocation of the references to specific ASTM standards from the Administrative Controls Section of the TS to a licensee-controlled document provides flexibility to use the most up-to-date standards available without amending the TS in the future.

The staff finds the above changes to TS 5.22 acceptable. The addition of an alternate test method for new fuel (TS 5.22.a.3) will better ensure the quality of the fuel shipments at FCS. The removal of specific ASTM references from the TS will reduce administrative burden, have no safety consequences, and will contribute to more efficient operation of the plant.

#### 4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Nebraska State official was notified of the proposed issuance of the amendment. The State official had no comments.

#### 5.0 ENVIRONMENTAL CONSIDERATION

The amendment changes a requirement with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20. The NRC staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendment involves no significant hazards consideration and there has been no public comment on such finding (69 FR 7526). Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Pursuant to 10 CFR 51.22(b) no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendment.

#### 6.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the

Commission's regulations, and (3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

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